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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,150	05/03/2006	Jun Seok Park	3449-0619PUS1	8811

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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

PHAM, THANH V

ART UNIT	PAPER NUMBER
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2894

NOTIFICATION DATE	DELIVERY MODE
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10/30/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/578,150	PARK, JUN SEOK	
	Examiner	Art Unit	
	THANH V. PHAM	2894	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6-9,11-14,27,40-46 and 48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 6-9, 11-14, 27, 40-46 and 48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/14/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/18/2009 has been entered.

Response to Amendment

Claim Rejections - 35 USC § 102 and § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-2, 6-9, 11-14 and ~~25-27~~ and ~~new~~ claims 40-46 and new claim 48 are rejected under 35 U.S.C. 102(a) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mazzochette et al. US Pub. 2004/0022433.

Re claim 1, the Mazzochette et al. reference discloses a light emitting device package, comprising:

a metal base 11;

an electrical circuit layer 13 provided at an upper side of the metal base for providing a conductive path (see [0025] and argument on element 17 in [0027] and [0030]-[0032]);

an insulating layer 12 sandwiched between the metal base and the electrical circuit layer;

a light emitting device 10 mounted on the top surface of the metal base in an open space from which the insulating layer 17 is removed;

an electrode layer 55 provided at an upper side of the electrical circuit layer (see also element 17 as above);

a connection portion 54 (in fig. 5, e.g.) for electrically connecting the electrode layer and the light emitting device (see further in [0034]);

a "silk screen" layer formed on the top surface of the electrode layer; and a lens portion ~~attached to position~~ along the "silk screen" layer, [0028]'s "the seal can be made hermetic by addition of a bonding pad and brazed seal ring";

[the "product by process" claim is directed to the product per se, no matter how actually made, In re Hirao, 190 USPQ 15 at 17 (footnote 3). See also In re Brown, 173 USPQ 685; In re Luck, 177 USPQ 523; In re Fessmann, 180 USPQ 324; In re Avery, 186 USPQ 161; In re Wertheim, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); and In re Marosi et al., 218 USPQ 289, all of which make it clear that it is the patentability of the final product per se which must be determined in a "product by process" claim, and not the patentability of the process, and that an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Therefore, in the light emitting device package, a layer could be formed by any method including "silk screen" on the top surface of the electrode layer then a lens portion attached to the silk screen layer.]

Re claim 2, the light emitting device package further comprising a “molding” portion for “molding” the inside of the open space (last lines of [0050]) [in the same manner as of the “silk screen” layer, as of product-by-process, the light emitting device could be molded by resin forming the lens portion or the lens portion could be molded.]

Re claim 6, in the light emitting device package, the open space is processed by milling, [0049]. Further, in the same manner as of the “silk screen” layer, as of product-by-process, the open space could be processed by any of the known methods.

Re claim 7, in the same manner as of the “silk screen” layer, as of product-by-process, the open space could be processed by etching.

Re claim 8, in the light emitting device package, the light emitting device is one or more LED chips selected from the group consisting of a red LED chip, a green LED chip, a blue LED chip, a yellow LED chip and an orange LED chip, [0043], e.g.

Re claim 9, in the light emitting device package, the light emitting device comes in contact with the metal base, fig. 3, e.g.

Re claim 11, in the light emitting device package, the light emitting device is combined to the metal base by a thermal conductive hardening agent 59.

Re claim 12, in the light emitting device package, the light emitting device is provided in a plurality of modules on one metal base, and the electrical circuit layer serially connects the respective modules, [0040]-[0043], e.g.

Re claim 13, in the light emitting device package, the light emitting device is provided in a plurality of modules on one metal base, and the modules are arranged in either straight line, round or polygon, figs. 8-12.

Re claim 14, in the light emitting device package, a "plating" layer is provided on the top surface of the electrode layer, wherein the electrode layer is plated with gold, [0029], e.g. [in the same manner as of the "silk screen" layer as of product-by-process, the electrode layer could be formed by an electroplating method.]

Re claim 27, in the same manner as of the "silk screen" layer as of product-by-process, the lens portion could be formed by molding method or any method.

Re ~~new~~ claim 40, limitations are the same as of claim 1 with a difference of the limitations of old canceled claims 3-4. Heat sinking element 16 of figs. 1 and 4 is attached underneath or "combined to" the metal base 11. The light emitting device package, in other variation, further comprises a heat sink 91 formed on the bottom surface of the metal base, combined to the metal base by a screw 95, fig. 9, e.g.

Re ~~new~~ claim 41, in the LED package of claim 40, limitations are the same as of old canceled claim 5, wherein the light emitting device package further comprising a heat sink that comes in contact with one surface of the metal base with a heat transfer material 16 embedded therein, fig. 7, e.g.

Re ~~new~~ claims 42-43 and 46, limitations are partially the same as in claims 1, 14 and old canceled claimed 15 and considered the same ([0029], e.g.).

Re ~~new~~ claims 44-45, limitations are the same as old canceled claims 16-17, in the light emitting device package, one of ordinary skill in the art would have been led to the recited dimensions through routine experimentation and optimization. Applicant has not disclosed that the dimensions are for a particular unobvious purpose, produce an unexpected result, or are otherwise critical, and it appears prima facie that the

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process would possess utility using another dimension. Indeed, it has been held that mere dimensional limitations are prima facie obvious absent a disclosure that the limitations are for a particular unobvious purpose, produce an unexpected result, or are otherwise critical. See, for example, *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955); *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984); *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). See also MPEP 2144.04(IV)(B).

~~Re new claim 47, limitations are the same as of claim 1 with a difference of the limitations of old canceled claim 10. The light emitting device package further consists of one or more SiOB chips, figs. 14-16.~~

Re new claim 48, the light emitting device package of claim 1, wherein the outermost peripheral portion of the lens is positioned along the "silk screen" layer, [0028].

Response to Arguments

4. Applicant's arguments filed 09/18/2009 have been fully considered but they are not persuasive.

5. In response to applicant's statement of "Mazzochette fails to disclose or suggest a LED package comprising a "silk screen" layer formed on the top surface of the electrode layer; and a lens portion positioned along a 'silk-screen' layer"; applicant is directed to Mazzochette et al.'s [0028] and/or [0034], e.g. Even "simply mentioned, [0028] and/or [0034] clearly teach "a lens portion positioned along the 'silk-screen' layer"

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or “the outermost peripheral portion of the lens portion is positioned along the ‘silk-screen’ layer”; other argument on the product-by-process is addressed in the rejection(s)

6. In response to applicant’s statement of “Mazzochette fails to disclose or suggest a LED package comprising a “the heat sink is combined to the metal base by a screw”; applicant is directed to Mazzochette et al.’s fig. 9 and associated passages, e.g. wherein the heat sink 91 is clearly *combined to* the metal base by a screw 95. Mazzochette et al.’s [0040] teaches that “the apertures and LEDs can be arranged across the surface of the board to achieve any desired configuration of a two-dimensional array o LEDs”.

7. In response to applicant’s statement of “Mazzochette fails to disclose or suggest a LED package comprising “an electrical circuit layer provided at an upper side of the metal base for providing a conductive path; an electrode layer provided at an upper side of the electrical circuit layer; and a plating layer provided on the top surface of the electrode layer”; applicant is directed back to fig. 1’s elements 10A, 10C, 13A, a3C and further to Mazzochette et al.’s fig. 2 and associated passages, e.g.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to THANH V. PHAM whose telephone number is (571)272-1866. The examiner can normally be reached on M-T (6:30-5:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly D. Nguyen can be reached on 571-272-2402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/THANH V. PHAM/

Primary Examiner, Art Unit 2894